in German, English, and French, thus facilitating difficulties of expression, all colleagues should be in a position to cooperate. There is no limit to the length of the contributions to "Gerland's Beiträge zur Geophysik," and the use of foreign languages will be an appreciated attribute. * * *

In general, the more detailed abstracts and reviews will replace the usually short ones. A list of the literature treating with geophysical research during the years 1914–1923 will be issued later on. On both sides the war interrupted the regular exchange of publications. The interruption thus caused—the gap brought about by the war—will be repaired as far as humanly possible.

The collaborators will be presented with 50 reprints of their treatises.

The publication will appear in single numbers, but will be calculated by volumes. Every effort will be made to publish the treatises as quickly as possible. Treatises should be submitted to the editor, who also replies to all questions.

The editor: Prof. Dr. V. Conrad, Mariahilferstr. 91, Vienna.
The publisher: Akademische Verlagsgesellschaft m. b. H., Leipzig.

TORNADO CLOUDS AT TOPEKA, KANSAS, JUNE 16, 1926

By S. D. FLORA, Meteorologist

Two small tornado clouds appeared at the eastern edge of Topeka at about 5 p. m. of June 16, moved east in almost parallel paths, and dissipated without serious damage.

One of these apparently originated at the eastern edge of North Topeka, just north of the Santa Fe shops. A man who saw the formation of the cloud stated it was caused "by two clouds coming together"—a very common observation of the origin of a tornado cloud.

The only member of the office force who witnessed the cloud was E. C. Corkill, junior observer, who first noted it from the office window at Fifth and Kansas Avenues, about 2 miles distant in an air line. Mr. Corkill first noticed it at 5.08 p. m., apparently a minute or two after it formed. His report states the upper part of the cloud was funnel shaped, extending down from an exceptionally threatening thunderstorm cloud. The lower part of this funnel terminated in a long light grey cloud, resembling an enormous rope dangling from it. A small boy who saw this cloud reported it was a "snake in the sky." This rope-shaped cloud seemed to drag from the parent funnel, twisting itself almost at right angles at times and darting towards the ground but, apparently, never quite reaching it, as seen from the office window. Subsequent events showed, however, that it extended to the ground once just east of the county line, about 4 miles from its point of origin. At this place, between the Union Pacific tracks and the Kansas River, near the old Jesse Willard farm, occurred the only damage that was reported. Several small farm buildings sustained minor damage, some trees were blown down, and a farm hand was picked up and carried about 60 feet and let down with no injury except a bad fright and a coating of mud.

The cloud disappeared about a mile east of this point by gradually drawing up into the thundercloud above, maintaining its funnel shape to the last. Mr. Corkill noted its disappearance at 5.17 p. m., which gave its rate of progression as about 5 miles in nine minutes.

The other cloud was first noted at about 5 p. m. just east of the city ball park, about 3 miles north of the cloud first described. It was practically of the same type and was in sight for about the same length of time. So far as could be ascertained it failed to reach the ground and did no damage whatever.

A display of mammato-cumulus clouds, covering about a tenth of the sky, preceded the tornado clouds a few minutes.

Another tornado cloud of about the same type was observed at about the same time 14 miles southwest of Topeka, 2 miles east of Auburn, moving east. It failed to reach the ground and did no damage.

THE WINTER 1924–25 IN ITALY

L. Borriello in *La Meteorologia Practica* for March–April, 1926, discusses the winter of 1924–25 in Italy, using the records of eleven stations well distributed over that country. Each of the winter months, December, January and February were warm, the average deviation from the normal being +1.5, +1.2 and +1.5° C., respectively. The cause of the warm winter is ascribed to the pressure distribution over central and southern Europe.—*A. J. H.*

FIRST WARNINGS OF FOREST-FIRE WEATHER IN ALASKA

The editor is informed that the first warnings of weather conditions favorable to the inception and spread of forest fires in Alaska were issued by the Juneau (Alaska) Office of the United States Weather Bureau on June 18, 19, 21, and 22 of the present year.

HEAVY RAINS AND DAMAGING FLOODS IN VARIOUS REGIONS

The outstanding feature of press reports which reach the editor is the wide-spread occurrence of flood-producing rains as indicated below:

(1) Rains in the last half of June in Hawaii broke a 5-months' drought in the islands of the group and greatly improved the agricultural situation.

(2) Heavy rains and floods occurred in central and western Europe in May and continued in parts of the Balkans and elsewhere in June, 1926, with some loss of life and great damage to crops.

(3) Six thousand families homeless and a loss of life, estimated at 1,000 persons, are reported incident to the bursting of a dam as the result of torrential rains in the vicinity of Leon, Guanajuato, a city of 65,000 inhabitants, situated in the midst of a highly cultivated agricultural district of Mexico about 1,000 miles south of the Rio Grande. Subsequent reports from Mexico show a continuation of heavy rains during July with much flooding in the great central valley in which Mexico City is situated.—*A. J. H.*

METEOROLOGICAL SUMMARY FOR SOUTHERN SOUTH AMERICA

By Senior J. B. NAVARRETE

[El Salto Observatory, Santiago, Chile]

During May occurred important meteorological changes which brought the beginning of the normal rainy season in the central zone. The paths of the low centers inclined progressively toward the north.

Between the 3d and 7th low pressure dominated the far south, falling to a minimum of 737 mm. on the 5th at Punta Arenas. Bad weather with frequent rains covered the whole southern zone as far north as Concepcion Province. The maximum precipitation for 24 hours was recorded on the 4th at Cabo Raper, 32 mm.

Between the 6th and 14th, pressure rose in the south, setting up anticyclonic control, with general fine weather, cold and frosts.

Between the 15th and 18th a new depression crossed southern South America, causing bad weather and rains as far north as Concepcion. Maximum precipitation for 24 hours was recorded on the 17th at Valdivia, 29 mm.

On the 19th a large depression appeared from the west, in the latitude of Isla Mocha. On the 20th, foul weather set in over the south, with heavy winds and rains. On the island of Huafo the mean wind velocity reached 1,700 m. p. m. (63 m. p. h.). On the 21st the rains extended into the Central Zone, reaching northward as far as Coquimbo Province. Rainfall of 47 mm. was registered at Valdivia, 26 mm. at Talca, and 15 mm. at Coquimbo. Between the 22d and 24th the depression weakened as the result of convergence of strong winds, in harmony with the laws of Guilbert.

From the 25th to the 31st the weather remained unstable, with frequent alternations of high and low pressure in the south. The most important depression of the period occurred during the 29th to 31st. It rained from Aconcagua Province to Valdivia, precipitation in the south ranging from 30 to 40 mm.

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RECENT PAPERS BEARING ON METEOROLOGY

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